UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,804	10/31/2003	Howard C. Simonson	07844-631001	2491

21876   7590   05/29/2008
FISH & RICHARDSON P.C.
P.O. Box 1022
MINNEAPOLIS, MN 55440-1022

EXAMINER
BELOUSOV, ANDREY

ART UNIT	PAPER NUMBER
2174	

MAIL DATE	DELIVERY MODE
05/29/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/698,804	SIMONSON ET AL.
	Examiner	Art Unit
	ANDREY BELOUSOV	2174

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *10 March 2008*.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-23,32-42 and 44-52* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) *1-23, 32-42, 44-52* is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)
1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

U.S. Patent and Trademark Office
PTOL-326 (Rev. 08-06)   Office Action Summary   Part of Paper No./Mail Date 20080526

DETAILED ACTION

This action is in responsive to the amendment filed on March 10, 2008. Claims 1-23,

32-42, 44-52 are pending and have been considered below. Claims 24-31, 43 and 53

have been cancelled.

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2.   Claims 1-4, 6, 7, 11, 15, 16, 18, 32, 33, 35, 37, 38, 44, 45, 47 and 48 are rejected

under 35 U.S.C. 102(b) as being anticipated by Eudora (Eudora® Email, User Manual

for Windows, Version 5.1.1, Copyright (c) 2001 by Qualcomm Inc.;

http://www.eudora.com/techsupport/kb/2350hq.html)

Claim 1, 32, 44: Eudora discloses a computer program product tangibly embodied on

machine-readable storage device, the product comprising instructions operable to

cause data processing apparatus to:

    a. display a table of data (pg. 2) as an element of a graphical user interface display

        and display a set of markers, each marker being associated with a row of the

        table or each marker being associated with a column of the table (pg. 2: "Who"

        and "Size" column tabs; pg. 6), the table of data having two or more sort keys

(pg. 2-3) having a sort key order including a most significant sort key (pg. 2, Size

is the most significant sort key), each sort key being a row or each sort key being

a column of the table, each sort key having a sort direction (pg. 4, ascending /

descending), each sort key having a position in the sort key order (pg. 2);

b. receive from the user an input gesture selecting a marker (pg. 2-3; selection of

Who tab);

c. establish the row or column associated with the user-selected marker as the

most significant sort key (pg. 3, Who column is sort alphabetically) in response to

the input gesture, and maintain the positions and sort directions of the remaining

sort keys in the sort key order (pg. 3, Size column is sorted secondarily, see rows

the 3 rows "Hil" and 5 rows of "Ste");

d. sort the table of data according to the two or more sort keys, the sort key order,

and the sort key directions in response to the input gesture (pg. 3); and

e. display the sorted data (pg. 3.)

Claim 2, 33: Eudora discloses the product of claim 1, wherein the user input gesture is

a selecting gesture for selecting the marker (pg. 2-3.)

Claim 3: Eudora discloses the product of claim 1, wherein the user input gesture

comprises a pointing device action on the marker (pg. 2-3.)

Claim 4: <u>Eudora</u> discloses the product of claim 1, wherein the user input gesture is a mouse click on the marker (pg. 2-3.)

Claim 6, 35, 45: <u>Eudora</u> discloses the product of claim 1, further comprising instructions to: represent the sort key order visually in the table by displaying the markers with a pattern of distinct visual properties (pg. 2-3: triangle indicates the most significant sort key.)

Claim 7: <u>Eudora</u> discloses the product of claim 6, wherein the pattern of distinct visual properties indicates the sort key order (pg. 2-3: triangle indicates the most significant sort key.)

Claim 11, 37, 47: <u>Eudora</u> discloses the product of claim 1, further comprising instructions to: determine whether the user-selected marker is associated with the most significant key (pg. 3: an inherent determination given that a selection of marker "Size" sets sorting to None), and if the user-selected marker is associated with the most significant key, change a sort direction of the most significant key, and if the user selected marker is not associated with the most significant key (pg. 2-3, "Who" column is not most significant), establish the row or column associated with the user-selected marker (pg. 3: "Who" column) as the most significant sort key, and maintain the positions and the sort directions of the remaining sort keys in the sort key order (pg. 3).

Claim 15: <u>Eudora</u> discloses the product of claim 1, wherein the number of sort keys for the table of data is limited to a predetermined number greater than one (e.g. two, pg. 6.)

Claim 16, 38, 48: <u>Eudora</u> discloses the product of claim 15, wherein the table of data has one or more sort keys having a sort key order including a most significant sort key and a least significant sort key the product further comprising instructions to:

    a. determine whether the table of data has the predetermined number of sort keys (pg. 6: selection of which columns to view predetermines the number to be displayed), and

    b. if the table of data has the predetermined number of sort keys (pg. 2: e.g. two), remove the least significant sort key from the sort key order, establish the row or column associated with the user-selected marker (pg. 3: "Who" is selected) as the most significant sort key, and maintain the positions and the sort directions of the remaining sort keys in the sort key order (pg. 3), and

    c. if the table of data has fewer than the predetermined number of sort keys establish the row or column associated with the user-selected marker as the most significant sort key, and maintain the positions and the sort directions of the remaining sort keys in the sort key order.

Claim 18: <u>Eudora</u> discloses the product of claim 1, wherein the marker is a column header (pg. 2.)

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 5 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Eudora.

Claim 5: Eudora discloses the product of claim 1. Eudora shows the use of a single

click to as user input gesture. Eudora does not explicitly disclose wherein the user input

gesture is a double mouse click on the marker. However, it is old and well known in the

computing art to use a double click in lieu of a single click for selection. Therefore, it

would have been obvious to one of ordinary skill in the art at the time the invention was

made to utilize a double click. One would have been motivated to use a double click

method of selection so as to meet the expectations of Window OS users.

Claim 19: Eudora discloses the product of claim 1. However Eudora does not explicitly

disclose wherein the marker is a row header. Examiner notes, that it would have been

obvious to one having ordinary skill in the art at the time the invention was made to

have the marker as a row header (as opposed to a column header as disclosed in

Eudora), since it has been held that rearranging parts (from column to row) of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

5.   Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eudora in view of Lane et al., (5,704,051.)

Claim 8, 9: Eudora discloses the product of claim 6. However, Eudora does not explicitly disclose wherein the pattern of distinct visual properties comprises a set of distinct colors. Lane discloses a graphical user interface including color coding using a pattern of distinct visuals properties comprising a set of distinct colors (5:57-61.) Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a well known technique of color coding patterns to improve similar graphical user interfaces of Lane and Eudora in the same manner to yield a predictable result of a graphical user interface that utilize color in a meaningful way to readily convey useful information to the user, as suggested in Lane.

6.   Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eudora view of Adelson et al., (5,006,722.)

Claim 10: Eudora discloses the product of claim 6. However, Eudora does not explicitly disclose wherein the pattern of distinct visual properties comprises a set of distinct non-textual representations of the sort key order. Adelson discloses a means for color

coding information so as to indicate different levels. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a well known technique of color coding information so as to indicated different sort orders, as taught in Eudora, to improve the graphical user interfaces of Adelson and Eudora and yield a predictable result of a graphical user interface that utilizes color in a meaningful way to readily convey useful information to the user, as suggested in Adelson.

7.   Claims 12, 13, 20, 34, 39 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eudora in view of Davies et al., (5,586,311.)

Claim 12, 20, 34, 39, 49: Eudora discloses the product of claim 1. However, Eudora does not explicitly disclose wherein the user input gesture is a dragging gesture for selecting the marker by dragging the marker to an area on the graphical user interface display. Davies discloses a graphical user interface for data access and analysis, including user input gesture for drag and dropping a sort criteria object unto an icon and/or icon area (5:8-21). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine Davies' teaching of using a drag and drop gesture with the disclosure of Eudora so as to provide a drag and drop means to specify a sort order. One would have been motivated to use a drag and drop means so as to provide an alternative way to do sort order, as suggested by Davies.

Claim 13: Eudora discloses the product of claim 12. Davies further discloses wherein

the area on the graphical user interface display comprises an icon (Fig. 3: 92.)

8.   Claims 21, 40 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Eudora in view of Davies., and in further view of MacGregor (5,396,621.)

Claim 21, 40, 50: Eudora and Davies disclose the product of claim 20. However,

Eudora does not disclose wherein the area of the graphical user interface display is an

icon, the product further comprising instructions to:

   a. receive from the user an input gesture selecting the icon, the icon being

       associated with a separate sort key list window; and

   b. display, in the separate sort key list window on the graphical user interface

       display, a list of sort keys comprising the one or more sort keys for the table of

       data having a sort key order including the most significant sort key.

MacGregor discloses a similar product for sorting information, comprising instructions

to:

   a. receive from the user an input gesture selecting the icon, the icon being

       associated with a separate sort key list window (Fig. 6(a): 602); and

   b. display, in the separate sort key list window on the graphical user interface

       display, a list of sort keys comprising the one or more sort keys for the table of

       data having a sort key order including the most significant sort key (Fig. 6(b)).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the separately displayed sort key list window as taught by MacGregor to the teachings of Eudora and Davies as it was a known technique to use separate windows for detailed configurations to improve similar products such as MacGregor and Eudora in the same fashion to obtain a predictable result.

9.   Claims 14, 22, 41 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eudora in view of Davies and in further view of Liu et al., (5,706,449.)

Claim 14: Eudora and Davies disclose the product of claim 12. However, Eudora and Davies do not explicitly disclose wherein the area on the graphical user interface display comprises a sort key list window. Liu discloses a similar product for a user to efficiently specify multiple sort criteria, including a sort key window (Fig. 10: 38.) Therefore, it would have been obvious to combine Liu's teaching of a sort key window with the disclosures of Eudora and Davies for dragging and dropping sort criteria markers. One would have been motivated to drag and drop markers to a sort key list window so as to provide an alternative way to do sort order, as suggested in Davies.

Claim 22, 41, 51: Eudora and Davies disclose the product of claim 20. However, Eudora and Davies do not explicitly disclose wherein the area of the graphical user interface display is a separate sort key list window, further comprising instructions to:

  a. display in the separate sort key list window, a list of sort keys comprising the one

     or more sort keys for the table of data having a sort key order including the most

     significant sort key.

Liu discloses a similar product for a user to efficiently specify multiple sort criteria,

including a sort key list window (Fig. 10: 38) further comprising instructions to:

  a. display in the separate sort key list window, a list of sort keys comprising the one

     or more sort keys for the table of data having a sort key order including the most

     significant sort key (Fig. 12: 38.)

Therefore, it would have been obvious to combine Liu's teaching of a sort key window

with the disclosures of Eudora and Davies for dragging and dropping sort criteria

markers. One would have been motivated to drag and drop markers to a sort key list

window so as to provide an alternative way to do sort order, as suggested in Davies.

10.   Claims 17, 36 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Eudora in view of Liu.

Claim 17, 36, 46: Eudora discloses the product of claim 1. However, Eudora does not

explicitly disclose further comprising instructions to: receive from the user an input

gesture deselecting a marker associated with a sort key; and remove the sort key

associated with the deselected marker from the sort key order while maintaining the

positions and the sort directions of the remaining sort keys in the sort key order. Liu

discloses a similar product for a user to efficiently specify multiple sort criteria,

comprising instructions to:

    a. receive from the user an input gesture deselecting a marker associated with a

       sort key (Fig. 13; 6:6-21); and

    b. remove the sort key associated with the deselected marker from the sort key

       order while maintaining the positions and the sort directions of the remaining sort

       keys in the sort key order (Fig. 13, 14; 6:6-21.)

Therefore, it would have been obvious to one having ordinary skill in the art at the time

the invention was made combine the teaching of Liu to Eudora. One would have been

motivated to deselect and maintain the positions of remaining sort keys as it was a

known technique to improve similar devices in the same way to yield a predictable

result.

11.   Claims 23, 42 and 52 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Eudora in view of Davies and in further view of MacGregor

(5,396,621.)

Claim 23, 42, 52: Eudora discloses a computer program product tangibly embodied on

machine-readable storage device for interacting with a user, the product comprising

instructions operable to cause data processing apparatus to:

    a. display a table of data (pg. 2) as an element of a graphical user interface display,

       and display a set of markers, each marker being associated with a row of the

table or each marker being associated with a column of the table (pg. 2: "Who"

and "Size" column tabs; pg. 6), the table of data having one or more sort keys

having a sort key order including a most significant sort key (pg. 2, Size is the

most significant sort key), each sort key being a row or each sort key being a

column of the table, each sort key having a sort direction (pg. 4, ascending /

descending);

b. maintain the positions and sort directions of the remaining sort keys in the sort

   key order (pg. 3, Size column is sorted secondarily, see rows the 3 rows "Hil" and

   5 rows of "Ste");;

c. sort the table of data according to the two or more sort keys, the sort key order,

   and the sort key directions in response to the input gesture (pg. 3); and

d. display the sorted data (pg. 3.)

However, Eudora does not explicitly disclose wherein the user input gesture is a

dragging gesture for selecting the marker by dragging the marker to an area on the

graphical user interface display. Davies discloses a graphical user interface for data

access and analysis, including user input gesture for drag and dropping a sort criteria

object unto an icon and/or icon area (5:8-21). Therefore, it would have been obvious to

one having ordinary skill in the art at the time the invention was made to combine

Davies' teaching of using a drag and drop gesture with the disclosure of Eudora so as to

provide a drag and drop means to specify a sort order. One would have been motivated

to use a drag and drop means so as to provide an alternative way to do a sort order, as

suggested by Davies.

Eudora does not explicitly disclose establishing the row or column associated with the user-selected marker as a sort key having a position in the sort key order defined by the location within the area. MacGregor discloses a sorting of information in a computerized spreadsheet or the like, including establishing a row or a column associated with a user-selected marker as a sort key having a position in the sort key order defined by the location within the area (Fig. 6(b).) Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teaching of MacGregor, having a numbered sort key order list, with the teaching of Eudora and Davies, so as to provide for establishing of a row or column to be associated with a user-selected marker (Eudora) as a result of by drag and dropping it (as disclosed in Davies) to a location within the area. One would have been motivated to combine the teachings of MacGregor to Eudora and Davies so as to provide a readily readable list of sort keys in a sort order, as suggested by MacGregor.

Response to Arguments

12.   Applicant's arguments with respect to claim 1-23, 32-42, 44-52 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

13.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Belousov whose telephone number is (571) 270-1695. The examiner can normally be reached on Mon-Fri (alternate Fri off) EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-3800.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AB
May 27, 2008

/David A Wiley/

Supervisory Patent Examiner, Art Unit 2174